```
EEEEEEEEEEEEEEEE  DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEE  DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEEEEEEEEEEE       DDD     DDD           TTT
EEEEEEEEEEEE       DDD     DDD           TTT
EEEEEEEEEEEE       DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEE                DDD     DDD           TTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD            TTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD            TTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD            TTT
```

```
CCCCCCCC  HH      HH  MM        MM  FFFFFFFFFF  IIIIII   NN      NN  EEEEEEEEEE  NN      NN  TTTTTTTTTT
CCCCCCCC  HH      HH  MM        MM  FFFFFFFFFF  IIIIII   NN      NN  EEEEEEEEEE  NN      NN  TTTTTTTTTT
CC        HH      HH  MMMM    MMMM  FF            II     NN      NN  EE          NN      NN      TT
CC        HH      HH  MMMM    MMMM  FF            II     NN      NN  EE          NN      NN      TT
CC        HH      HH  MM  MM  MM    FF            II     NNNN    NN  EE          NNNN    NN      TT
CC        HH      HH  MM  MM  MM    FF            II     NNNN    NN  EE          NNNN    NN      TT
CC        HHHHHHHHHH  MM        MM  FFFFFFF       II     NN  NN  NN  EEEEEEE     NN  NN  NN      TT
CC        HHHHHHHHHH  MM        MM  FFFFFFF       II     NN  NN  NN  EEEEEEE     NN  NN  NN      TT
CC        HH      HH  MM        MM  FF            II     NN    NNNN  EE          NN    NNNN      TT
CC        HH      HH  MM        MM  FF            II     NN    NNNN  EE          NN    NNNN      TT
CC        HH      HH  MM        MM  FF            II     NN      NN  EE          NN      NN      TT
CC        HH      HH  MM        MM  FF            II     NN      NN  EE          NN      NN      TT       ....
CCCCCCCC  HH      HH  MM        MM  FF          IIIIII   NN      NN  EEEEEEEEEE  NN      NN      TT       ....
CCCCCCCC  HH      HH  MM        MM  FF          IIIIII   NN      NN  EEEEEEEEEE  NN      NN      TT       ....

LL             IIIIII      SSSSSSSS
LL             IIIIII      SSSSSSSS
LL               II      SS
LL               II      SS
LL               II      SS
LL               II      SS
LL               II        SSSSSS
LL               II        SSSSSS
LL               II              SS
LL               II              SS
LL               II              SS
LL               II              SS
LLLLLLLLLL     IIIIII      SSSSSSSS
LLLLLLLLLL     IIIIII      SSSSSSSS
```

```
   1    0001  O  %TITLE 'EDT$CHMFINENT - find page and paragraph entities'
   2    0002  O  MODULE EDT$CHMFINENT (                              ! Find page and paragraph entities
   3    0003  O                  IDENT = 'V04-000'                   ! File: CHMFINENT.BLI Edit: JBS1004
   4    0004  O                  ) =
   5    0005  1  BEGIN
   6    0006  1  !
   7    0007  1  !**************************************************************************
   8    0008  1  !*                                                                        *
   9    0009  1  !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                               *
  10    0010  1  !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                *
  11    0011  1  !*  ALL RIGHTS RESERVED.                                                  *
  12    0012  1  !*                                                                        *
  13    0013  1  !*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
  14    0014  1  !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH LICENSE  AND WITH THE  *
  15    0015  1  !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER *
  16    0016  1  !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
  17    0017  1  !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY *
  18    0018  1  !*  TRANSFERRED.                                                          *
  19    0019  1  !*                                                                        *
  20    0020  1  !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE *
  21    0021  1  !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT *
  22    0022  1  !*  CORPORATION.                                                          *
  23    0023  1  !*                                                                        *
  24    0024  1  !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS *
  25    0025  1  !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.               *
  26    0026  1  !*                                                                        *
  27    0027  1  !*                                                                        *
  28    0028  1  !**************************************************************************
  29    0029  1
  30    0030  1
  31    0031  1  !++
  32    0032  1  ! FACILITY:      EDT -- The DEC Standard Editor
  33    0033  1  !
  34    0034  1  ! ABSTRACT:
  35    0035  1  !
  36    0036  1  !      This module finds the page and paragraph entities.
  37    0037  1  !
  38    0038  1  ! ENVIRONMENT:  Runs at any access mode - AST reentrant
  39    0039  1  !
  40    0040  1  ! AUTHOR: Bob Kushlis, CREATION DATE: Unknown
  41    0041  1  !
  42    0042  1  ! MODIFIED BY:
  43    0043  1  !
  44    0044  1  ! 1-001 - Original.  DJS 04-Feb-1981.  This module was created by
  45    0045  1  !         extracting the routine EDT$$FND_ENT  from module CHANGE.BLI.
  46    0046  1  ! 1-002 - Regularize headers.  JBS 02-Mar-1981
  47    0047  1  ! 1-003 - Correct description of routine value.  JBS 01-Oct-1981
  48    0048  1  ! 1-004 - Improve the appearance of the listing.  JBS 13-Jun-1983
  49    0049  1  !--
  50    0050  1
```

D 8

EDT$CHMFINENT   EDT$CHMFINENT - find page and paragraph entitie 15-Sep-1984 23:56:01   VAX-11 Bliss-32 V4.0-742   Page 2
V04-000   Declarations   14-Sep-1984 12:22:30   [EDT.SRC]CHMFINENT.BLI;1   (2)

```
   52        0051  1  %SBTTL 'Declarations'
   53        0052  1  !
   54        0053  1  ! TABLE OF CONTENTS:
   55        0054  1  !
   56        0055  1
   57        0056  1  REQUIRE 'EDTSRC:TRAROUNAM';
   58        0495  1
   59        0496  1  FORWARD ROUTINE
   60        0497  1      EDT$$FND_ENT;                                    ! Search for a page or paragraph entity
   61        0498  1
   62        0499  1  !
   63        0500  1  ! INCLUDE FILES:
   64        0501  1  !
   65        0502  1
   66        0503  1  REQUIRE 'EDTSRC:EDTREQ';
   67        0638  1
   68        0639  1  !
   69        0640  1  ! MACROS:
   70        0641  1  !
   71        0642  1        NONE
   72        0643  1  !
   73        0644  1  ! EQUATED SYMBOLS:
   74        0645  1  !
   75        0646  1        NONE
   76        0647  1  !
   77        0648  1  ! OWN STORAGE:
   78        0649  1  !
   79        0650  1        NONE
   80        0651  1  !
   81        0652  1  ! EXTERNAL REFERENCES:
   82        0653  1  !
   83        0654  1  !      In the routine
```

E 8

EDT$CHMFINENT   EDT$CHMFINENT - find page and paragraph entitie 15-Sep-1984 23:56:01   VAX-11 Bliss-32 V4.0-742   Page   3
V04-000   EDT$$FND_ENT - find page and paragraph entitie 14-Sep-1984 12:22:30   [EDT.SRC]CHMFINENT.BLI;1   (3)

```
  85   0655  1  %SBTTL 'EDT$$FND_ENT  - find page and paragraph entities'
  86   0656  1
  87   0657  1  GLOBAL ROUTINE EDT$$FND_ENT (                           ! Find page and paragraph entities
  88   0658  1      ENT,                                               ! The entity to search for
  89   0659  1      DIR,                                               ! The direction to search
  90   0660  1      INC_DELIM                                          ! Include delimiter in the found string
  91   0661  1      ) =
  92   0662  1
  93   0663  1  !++
  94   0664  1  ! FUNCTIONAL DESCRIPTION:
  95   0665  1  !
  96   0666  1  !       This routine is used to isolate the page and paragraph entities, which
  97   0667  1  !       are based upon a search string which must be found.
  98   0668  1  !
  99   0669  1  ! FORMAL PARAMETERS:
 100   0670  1  !
 101   0671  1  !   ENT                     The entity to search for
 102   0672  1  !
 103   0673  1  !   DIR                     The direction to search
 104   0674  1  !
 105   0675  1  !   INC_DELIM               Include delimiter in the found string
 106   0676  1  !
 107   0677  1  ! IMPLICIT INPUTS:
 108   0678  1  !
 109   0679  1  !       NONE
 110   0680  1  !
 111   0681  1  ! IMPLICIT OUTPUTS:
 112   0682  1  !
 113   0683  1  !       NONE
 114   0684  1  !
 115   0685  1  ! ROUTINE VALUE:
 116   0686  1  !
 117   0687  1  !       1 = found, 0 = not found, 2 = terminated by control C
 118   0688  1  !
 119   0689  1  ! SIDE EFFECTS:
 120   0690  1  !
 121   0691  1  !       NONE
 122   0692  1  !
 123   0693  1  !--
 124   0694  1
 125   0695  2     BEGIN
 126   0696  2
 127   0697  2     EXTERNAL ROUTINE
 128   0698  2         EDT$$STR_SEACMD,                                ! Search for a specific string
 129   0699  2         EDT$$CS_BOTBUF,                                 ! Move to bottom of buffer
 130   0700  2         EDT$$CS_LEFT,                                   ! Move left a character
 131   0701  2         EDT$$CS_RIGHT,                                  ! Move right a character
 132   0702  2         EDT$$CS_TOP;                                    ! Move to top of buffer
 133   0703  2
 134   0704  2     EXTERNAL
 135   0705  2         EDT$$G_SEA_BEG;                                 ! Leave search at begining if on
 136   0706  2
 137   0707  2     LOCAL
 138   0708  2         SAVE_BEGIN,
 139   0709  2         SUCCEED;
 140   0710  2
 141   0711  2  !+
```

```
 142    0712   2 ! Temporarily put us in BEGIN mode, so we position to the beginning
 143    0713   2 ! of the entity delimiter.
 144    0714   2 !-
 145    0715   2     SAVE_BEGIN = .EDT$$G_SEA_BEG;
 146    0716   2     EDT$$G_SEA_BEG = 1;
 147    0717   2 !+
 148    0718   2 ! If searching backward, move back the length of the delimiter before
 149    0719   2 ! starting.
 150    0720   2 !-
 151    0721   2
 152    0722   3     IF (.DIR EQL DIR_BACKWARD)
 153    0723   2     THEN
 154    0724   2
 155    0725   2         INCR I FROM 0 TO CH$RCHAR (.ENT) DO
 156    0726   2             EDT$$CS_LEFT ();
 157    0727   2
 158    0728   2 !+
 159    0729   2 ! Do the search.
 160    0730   2 !-
 161    0731   2     SUCCEED = EDT$$STR_SEACMD (CH$PTR (.ENT, 1), CH$RCHAR (CH$PTR (.ENT)), 0, .DIR);
 162    0732   2 !+
 163    0733   2 ! Restore the BEGIN/END parameter.
 164    0734   2 !-
 165    0735   2     EDT$$G_SEA_BEG = .SAVE_BEGIN;
 166    0736   2 !+
 167    0737   2 ! Check to see whether or not it was found.  If not then move
 168    0738   2 ! to the top or bottom depending on the direction.  In this case
 169    0739   2 ! we want to fail if we are already at top or bottom.
 170    0740   2 !-
 171    0741   2
 172    0742   3     IF (.SUCCEED EQL 0)
 173    0743   2     THEN
 174    0744   3         BEGIN
 175    0745   3
 176    0746   4         IF (.DIR EQL DIR_BACKWARD)
 177    0747   3         THEN
 178    0748   4             BEGIN
 179    0749   4             SUCCEED = EDT$$CS_LEFT ();
 180    0750   4             EDT$$CS_TOP ();
 181    0751   4             END
 182    0752   3         ELSE
 183    0753   4             BEGIN
 184    0754   4             SUCCEED = EDT$$CS_RIGHT ();
 185    0755   4             EDT$$CS_BOTBUF ();
 186    0756   4             END;
 187    0757   3
 188    0758   3         END
 189    0759   2     ELSE
 190    0760   2
 191    0761   3         IF (.SUCCEED EQL 1)
 192    0762   2         THEN
 193    0763   2
 194    0764   3             IF (.INC_DELIM NEQ 0)
 195    0765   2             THEN                                        ! include the delimiter.
 196    0766   2
 197    0767   2                 INCR I FROM 1 TO CH$RCHAR (.ENT) DO
 198    0768   2                     EDT$$CS_RIGHT ();
```

```
; 199      0769 2
; 200      0770 2        RETURN (.SUCCEED);
; 201      0771 1        END;                                           ! of routine EDT$$FND_ENT
;

;                                                 .TITLE  EDT$CHMFINENT EDT$CHMFINENT - find page and par
;                                                                       agraph entitie
                                                  .IDENT  \V04-000\

                                                  .EXTRN  EDT$$STR_SEACMD
                                                  .EXTRN  EDT$$CS_BOTBUF, EDT$$CS_LEFT
                                                  .EXTRN  EDT$$CS_RIGHT, EDT$$CS_TOP
                                                  .EXTRN  EDT$$G_SEA_BEG

                                                  .PSECT  _EDT$CODE,NOWRT, SHR, PIC,2

                                 01FC 00000       .ENTRY  EDT$$FND_ENT, Save R2,R3,R4,R5,R6,R7,R8    ; 0657
             58 00000000G  00  9E 00002           MOVAB   EDT$$CS_RIGHT, R8
             57 00000000G  00  9E 00009           MOVAB   EDT$$CS_LEFT, R7
             56 00000000G  00  9E 00010           MOVAB   EDT$$G_SEA_BEG, R6
             55           66  D0 00017            MOVL    EDT$$G_SEA_BEG, SAVE_BEGIN             ; 0715
             66           01  D0 0001A            MOVL    #1, EDT$$G_SEA_BEG                     ; 0716
                         52  D4 0001D             CLRL    R2                                     ; 0722
                      08 AC  D5 0001F             TSTL    DIR
                         12  12 00022             BNEQ    3$
                         52  D6 00024             INCL    R2
             53       04 BC  9A 00026             MOVZBL  @ENT, R3                               ; 0725
             54          01 CE 0002A             MNEGL   #1, I
                         03  11 0002D             BRB     2$
             67          00 FB 0002F 1$:          CALLS   #0, EDT$$CS_LEFT                       ; 0726
    F9       54          53 F3 00032 2$:          AOBLEQ  R3, I, 1$
                      08 AC  DD 00036 3$:         PUSHL   DIR                                    ; 0731
                         7E  D4 00039             CLRL    -(SP)
             7E       04 BC  9A 0003B             MOVZBL  @ENT, -(SP)
    7E       AC       01 C1 0003F               ADDL3   #1, ENT, -(SP)
    00000000G 00       04 FB 00044             CALLS   #4, EDT$$STR_SEACMD
             54          50 D0 0004B             MOVL    R0, SUCCEED
             66          55 D0 0004E             MOVL    SAVE_BEGIN, EDT$$G_SEA_BEG             ; 0735
                         54  D5 00051             TSTL    SUCCEED                                ; 0742
                         21  12 00053             BNEQ    5$
             0F          52 E9 00055             BLBC    R2, 4$                                  ; 0746
             67          00 FB 00058             CALLS   #0, EDT$$CS_LEFT                       ; 0749
             54          50 D0 0005B             MOVL    R0, SUCCEED
    00000000G 00       00 FB 0005E             CALLS   #0, EDT$$CS_TOP                         ; 0750
                         28  11 00065             BRB     8$                                    ; 0746
             68          00 FB 00067 4$:         CALLS   #0, EDT$$CS_RIGHT                      ; 0754
             54          50 D0 0006A             MOVL    R0, SUCCEED
    00000000G 00       00 FB 0006D             CALLS   #0, EDT$$CS_BOTBUF                     ; 0755
                         19  11 00074             BRB     8$                                    ; 0742
             01          54 D1 00076 5$:         CMPL    SUCCEED, #1                            ; 0761
                         14  12 00079             BNEQ    8$
                      0C AC  D5 0007B             TSTL    INC_DELIM                              ; 0764
                         0F  13 0007E             BEQL    8$
             53       04 BC  9A 00080             MOVZBL  @ENT, R3                               ; 0767
                         52  D4 00084             CLRL    I
                         03  11 00086             BRB     7$
             68          00 FB 00088 6$:         CALLS   #0, EDT$$CS_RIGHT                      ; 0768
```

H 8

```
                   F9             52             53 F3 0008B 7$:      AOBLEQ  R3, 1, 6$           : 0770
                                  50             54 DO 0008F 8$:      MOVL    SUCCEED, R0         : 0771
                                                    04 00092          RET
```

; Routine Size: 147 bytes,   Routine Base: _EDT$CODE + 0000

```
: 202              0772 1
: 203              0773 1 !<BLF/PAGE>
```

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EDT$CHMFINENT   EDT$CHMFINENT - find page and paragraph entitie 15-Sep-1984 23:56:01   VAX-11 Bliss-32 V4.0-742   Page 7
V04-000   EDT$$FND_ENT - find page and paragraph entitie 14-Sep-1984 12:22:30   [EDT.SRC]CHMFINENT.BLI;1   (4)

```
;  205        0774  1 END                                            ! of module EDT$CHMFINENT
;  206        0775  1
;  207        0776  0 ELUDOM
```

;
;
;   PSECT SUMMARY
;
;   Name   Bytes   Attributes
;
;   _EDT$CODE   147 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

;
;   Library Statistics
;
;   --------- Symbols ---------   Pages   Processing
;   File   Total   Loaded   Percent   Mapped   Time
;
;   _255DUA28:[EDT.SRC]EDT.L32;1   377   1   0   40   00:00.2
;   _255DUA28:[EDT.SRC]PSECTS.L32;1   2   1   50   7   00:00.1

;   COMMAND QUALIFIERS
;
;   BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS$:CHMFINENT/OBJ=OBJ$:CHMFINENT MSRC$:CHMFINENT.BLI/UPDATE=(ENH$:C
;   HMFINENT)
;
; Size: 147 code + 0 data bytes
; Run Time: 00:12.2
; Elapsed Time: 00:15.1
; Lines/CPU Min: 3816
; Lexemes/CPU-Min: 10386
; Memory Used: 78 pages
; Compilation Complete

CHMFINENT
LIS

CHMINIT
LIS

CHMGCOUNT
LIS

CHMGINSTR
LIS

CHMGSUSTR
LIS

CHMINSMOD
LIS

CHMEMESS
LIS

CHMINSTAB
LIS

CHMENTTRM
LIS

CHMGBUF
LIS

CHMINSCHR
LIS

CHMINDATE
LIS

CHMEXVERB
LIS

CHMFINSTR
LIS

CHMGDIR
LIS

CHMGQUSTR
LIS

CHMHLPKPD
LIS

CHMINSSTR
LIS

CHMKEYWRD
LIS

CHMENDWRD
LIS

CHMEXCOM
LIS